

PHENIX WEEKLY PLANNING



9/22/2011
Don Lynch

This Week

- RPC1 North Installation continues (All octants in)
- Begin CM west side hanging platform installation
- Continue RPC1 cable installation prep
- Continue building RPC1 racks
- MuTr station 2 termination/dry air distribution header modification/re-installation on station 1 side
- Remove station 2 access from station 1 side
- Reconfigure scaffolding for MuTr sta 1 N re-installation Done
- Begin re-installation of MuTr station 1
- Begin design Sta 2 (from station 3 side) & station 3 North access (lower $\frac{1}{2}$ only)
- Continue assembly & QA of RPC1S octants at RPC factory
- VTX repairs/upgrades/reassembly continues
- FVTX assembly continues
- Design BP protection for south station 1
- Continue design and procurement for RPC3 shielding, Hodoscope, AH Crane upgrade & repairs, and R134A shed

Next Week

- RPC1 North Installation continues (All octants in)
- Continue CM west side hanging platform installation
- RPC1 cable installation begins
- Finish building RPC1 racks
- RPC1 survey
- Complete MuTr station 2 termination/dry air distribution header modification/re-installation on station 1 side/troubleshooting
- Remove station 2 access from station 1 side
- Reconfigure scaffolding for MuTr sta 1 N re-installation (upper)
- Complete re-installation of MuTr station 1
- Re-install north bridge section
- Continue design Sta 2 (from station 3 side) & station 3 North access (lower $\frac{1}{2}$ only)
- Continue assembly & QA of RPC1S octants at RPC factory
- VTX repairs/upgrades/reassembly continues
- FVTX assembly continues
- Complete Design BP protection for south station 1
- Continue design and procurement for RPC3 shielding, Hodoscope, AH Crane upgrade & repairs, and R134A shed

- Remaining Work Permits needed: End of Shutdown WP 10/1
- South BP protection 10/24
- Reinstall BBC North 10/10
- MPC N troubleshooting 10/10
- CM alignment stops 11/14
- Reinstall BBC South 11/14
- MPC S troubleshooting 11/21
- Upgrade AH crane 10/15-11/30
- DC/PC1 East/West troubleshooting as required 10/3-11/15
- Undefined detector subsystem maintenance and repairs 7/25-11/7
- RPC3 Shielding 11/21
- RPC Hodoscope 11/21
- Prep for EC roll in, reinstall MMS lampshade 11/28-12/2
- Roll in EC 12/5
- Prep IR for run 12/5-12/9
- VTX, FVTX and RPC1 Services and QA tests 9/16-11/30
(including 4 new racks)
- BP Survey 10/17-12/12
- EC prep & roll-in, IR run prep, Pink/Blue/White sheets 12/5-12/23
- New and upgraded full detector commissioning 9/15-12/31
- Run 12 cooldown 1/1/2012

VTX/FVTX Tasks

2011 Shutdown

TECHNICAL SUPPORT ZONE

- | | | |
|--|-------|-------------|
| • VTX pixel/strip pixel repairs | | 9/26 |
| • VTX re-assembly | 10/3 | |
| • VTX QA tests | | 10/10 |
| • VTX (w/o FVTX) survey | | 10/24 |
| • FVTX procurement & Assembly | 10/10 | |
| • FVTX QA tests | | 10/17 |
| • VTX+FVTX final installation to start | | 10/21 |
| • Final VTX+FVTX Integration & Survey in Chem Lab | | 10/24 |
| • VTX+FVTX move to 1008 | | 10/31 |
| | | |
| • VTX/FVTX Installation at 1008 | | |
| • Build 2 FVTX racks | | 7/1-10/31 |
| • Install VTX/FTX, Re-connect VTX services, Install FVTX services, survey and QA tests | | 10/31-11/21 |
| • VTX/FVTX Commissioning & Contingency | | 11/11-12/31 |
| • Chiller leak/contamination improvements | | 10/1 |

VTX Status

- Stripixel:
 - Miljko finished modifications last week
 - East side readout testing complete. All ladders work at high speed, random triggers in lab
 - West side readout testing in progress (3-4 days)
- Pixels
 - Leak testing of east side: 22-23 Sept 2011
 - West side ready for cleaning: 22-27 Sept 2011
 - 33 SPIROs being re-reworked, Delivery by 30-Sept
 - New ladder scheduled for Sept 29 delivery to RIKEN, Oct-4 delivery to BNL

MuTr North Station 1 work

- Clean/install new parts and upgrades (MuTr (3 weeks, At RPC Factory) **Done**
- Re-install chambers and FEE plates (1 week) **9/26-9/30**
- **Re-install north section of bridge** **9/30**
- Re-cable, re-hose and test (3 weeks) **10/3-10/21**
- **Move CM north** **10/21**

MuTr Station 2 N (from sta 1 side) terminators and Dry air header mod

- Station 2 Maintenance/upgrade through access opened by station 1 removal **9/2/-9/23**

MuTr North & South Station 2 & 3 Re-cap clamps

(No internal work platforms to upper octants)

- Install new capacitor clamps and terminators in lower octants **(In Progress)**
7/25-12/31
- Re-install MMS east vertical lampshade **11/15**

RPC Tasks

- **Assembly at QA tests at RPC Factory** 10/17
- Build 1 new rack, upgrade existing RPC1 prototype rack 7/25-9/30
- Install north RPC1 (including **both** racks & services) 9/6-10/7
- HV Tests, gas system calibration 9/23-10/21
- Move Station 1 work platforms to south station 1 10/28
- Install south RPC1 10/31-11/23
- **Remove all scaffolding and hanging platforms** 12/5
- RPC1 north and south commissioning 9/6-12/5
- RPC3 HV Distribution modifications, gas distribution modifications, PS calibration HV and services testing

TECHNICAL SUPPORT ZONE

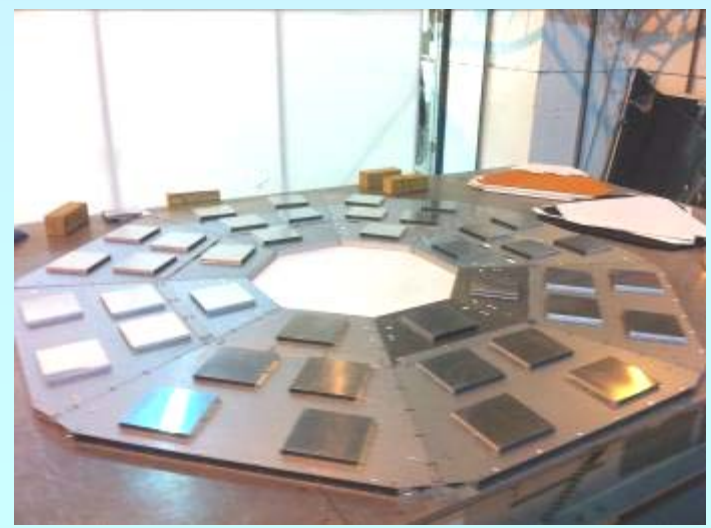
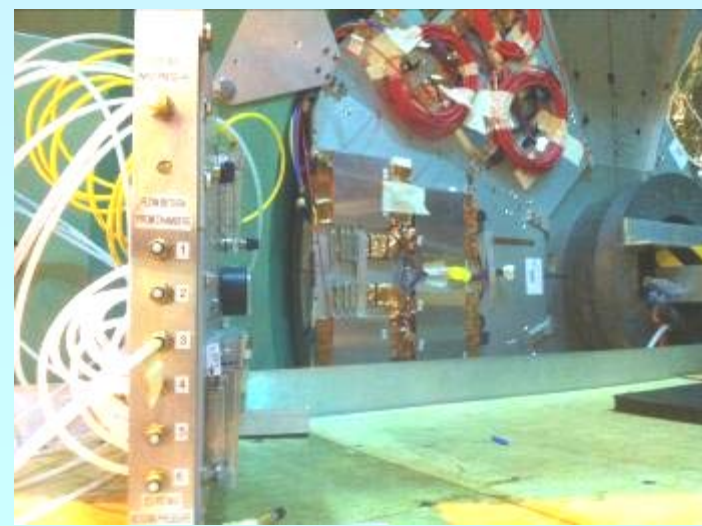
- RPC1
 - HV Cables *Ready for routing*
 - Signal cables *Ready for installation*
 - LV cables *Ready for innstallation*
 - Racks
 - Assembly *9/30*
 - Install on bridge *10/7*
- RPC3 additional HV boxes *Ass'y in progress*
- FVTX
 - Bias cables *pigtails due 9/26, extensions PO placed*
 - LV cables *PO placed term. of ROC LV cables in-house*
 - Fiber *PO placed, Control & trunk fibers and patch bays ready*
 - *Mapper boards* *PO placed*
 - CMT3 and CMT4 FVTX racks
 - Assembly *10/31*
 - Install on bridge *11/4*
- VTX Modify thermocouple connections *Procurement Done, installation 11/21*
- PC Board Designs
 - PbSc teminator board production *sent for fabrication*
 - New LV Dist front panels *sent for fabrication*
 - GL1 6X1 Multiplexer assemblies *final checking this week*
 - New MPC junction board *waiting for specs*
 - Dual SVX board for E. Kistenev *waiting for specs*
- West carriage ADAM system performance upgrade *2 new Modbus servers arrived, bench test & install panel upgrade in WCB for single ADAM control*
- LeCroy HV control retrofit testing *Still Waiting for doc. from Debrecen Inst*
- Design/Install FVTX Interlock system. *Design Done ready for installation*

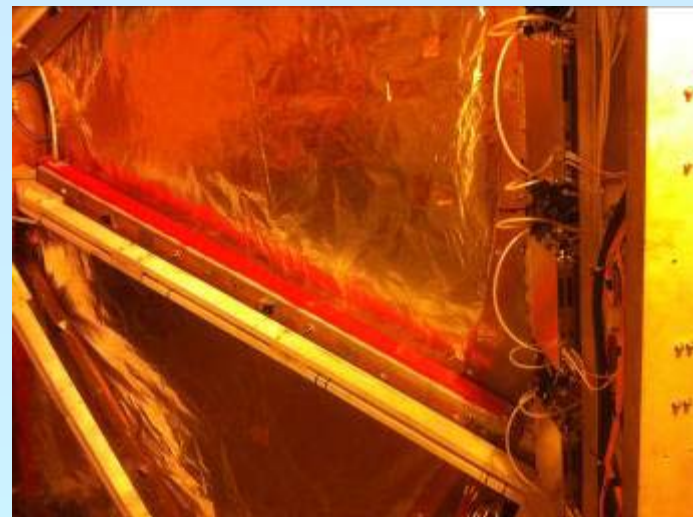
Miscellaneous Gas & Cooling System Tasks

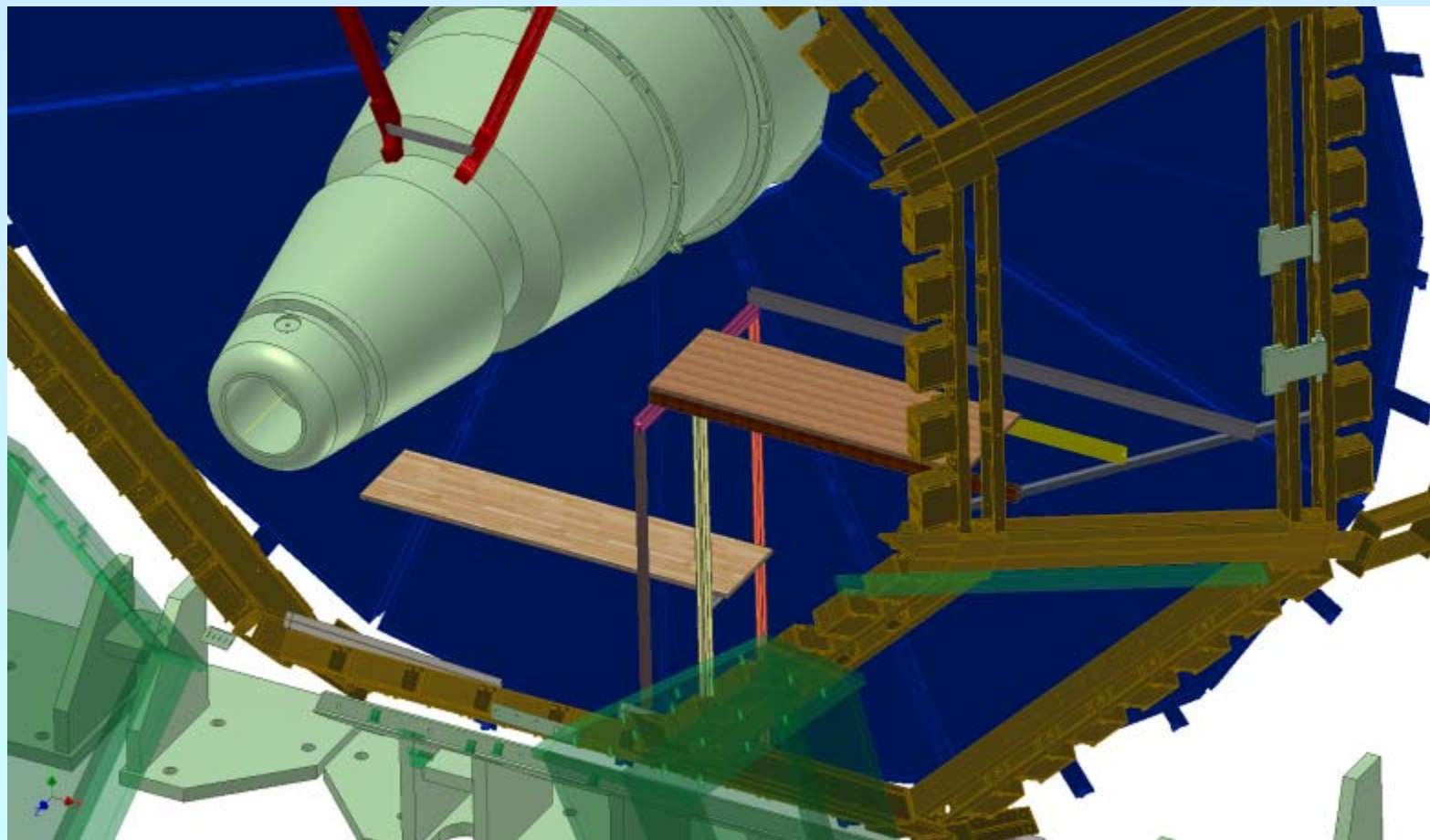
- Redo bypass line on VTX/FVTX spare chiller to remove kink 7/1-12/31
- Move RPC R134A tanks nearer to GMH, install cover, insulated lines 7/1-12/31
- Replace MuTr flowmeters (north and south) 7/1-12/31
- RPC $\frac{1}{4}$ " copper line from RPC rack to CM 7/1-12/31
- Relocate RPC3 South gas rack from tunnel mezzanine to tunnel floor Done

TECHNICAL SUPPORT NO. 1

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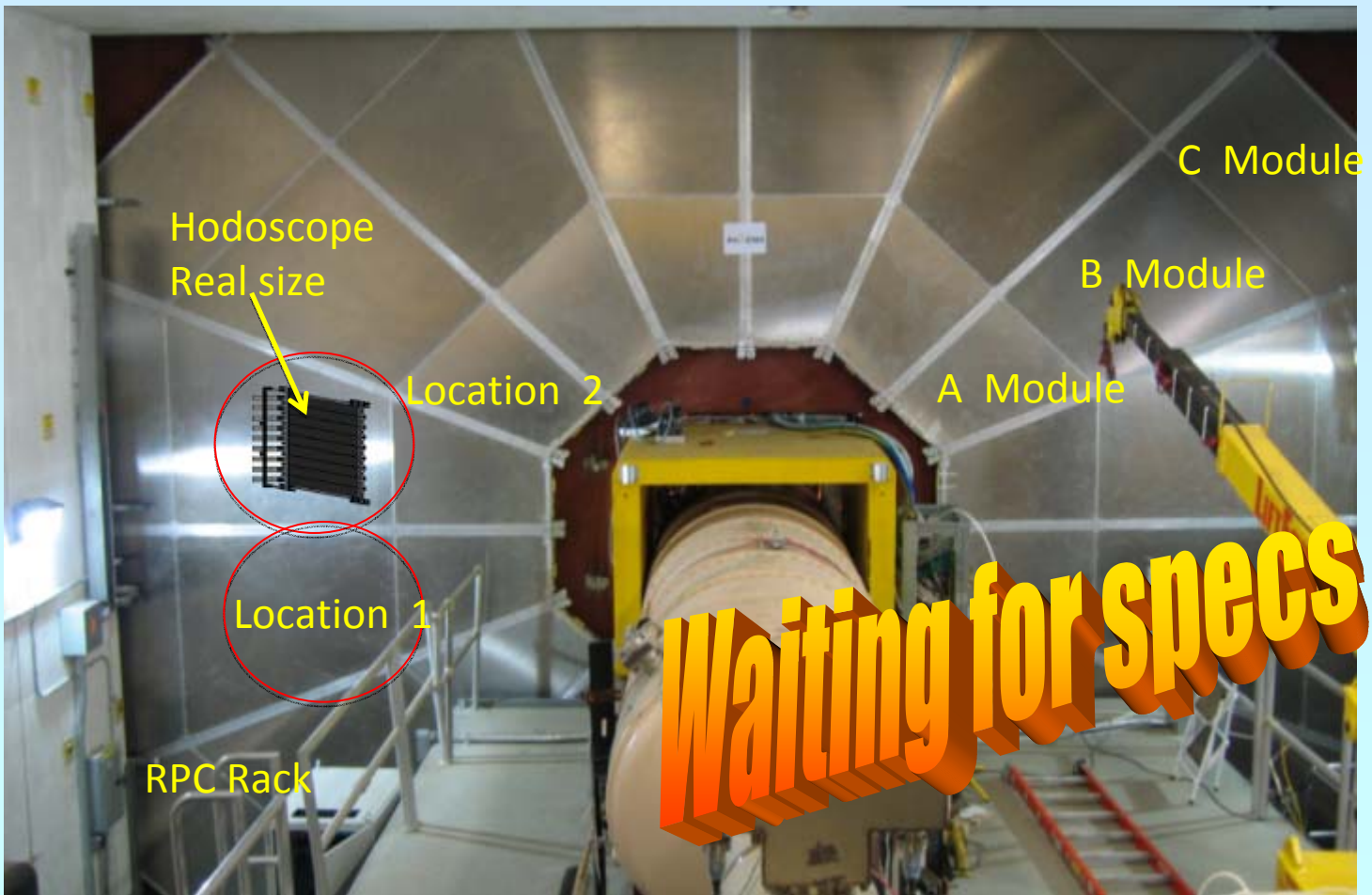






RPC Hodoscope

TECHNICAL SUPPORT



Close to RPC3 electronics rack
Less Beam background region



Location 1 or 2 would be good position

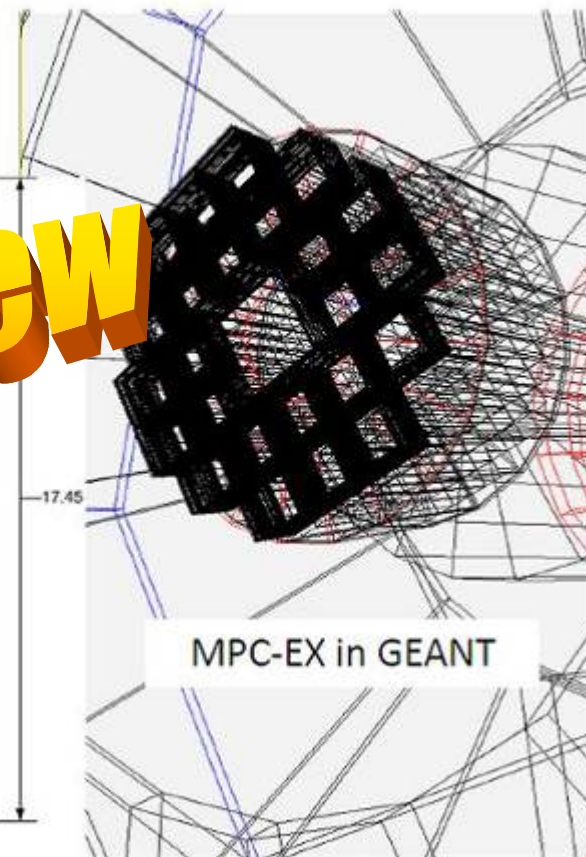
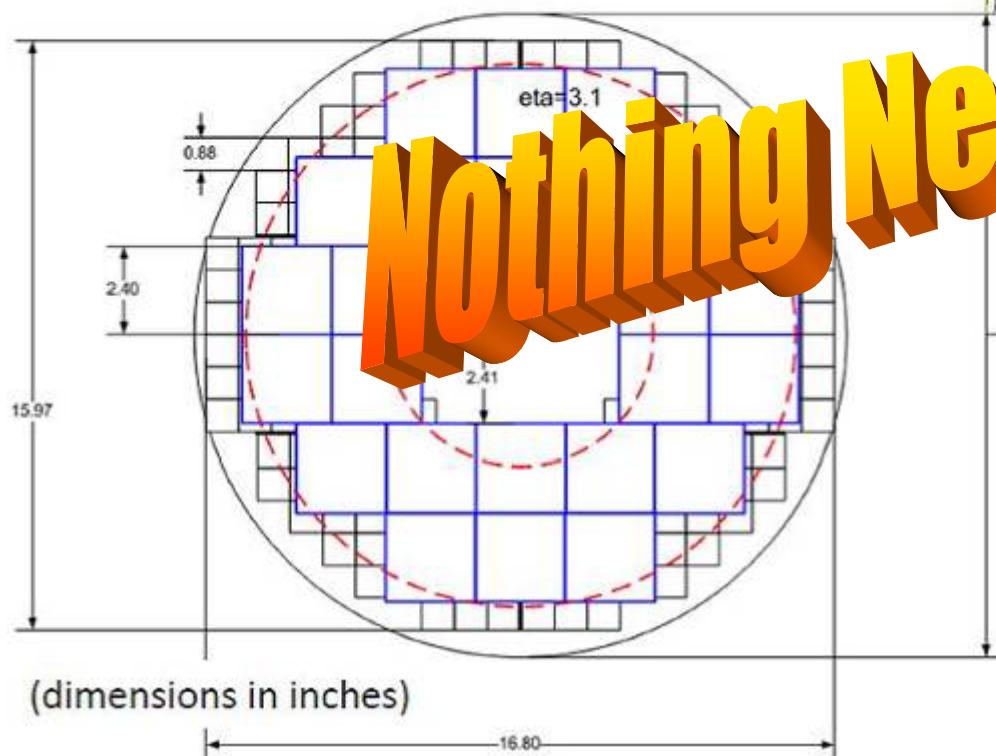
Need shed for R134A bottles close to GMH. No heating in shed (except heating blankets), lines to be insulated. Last year heating blankets kept gas warm but long length of pipe allowed gas to liquify on coldest days.



Possible location for shed 8' deep with 10' x 8' doors, and with bottom and top openings.. should satisfy ODH issues ~\$2K.

Design of the MPC-EX

Detector is designed around 6.2cm x 6.2cm modules (Si pad or strip detectors) separated by 2mm tungsten plates.



Nothing New

- Roof leaks in utility bathroom at northwest corner behind tech offices, over door between rack room and assembly hall, over door between control room and elect. ass'y room, southeast corner of IR and laser room.



- Flooding in AH/ Driveway heaving

Nothing New

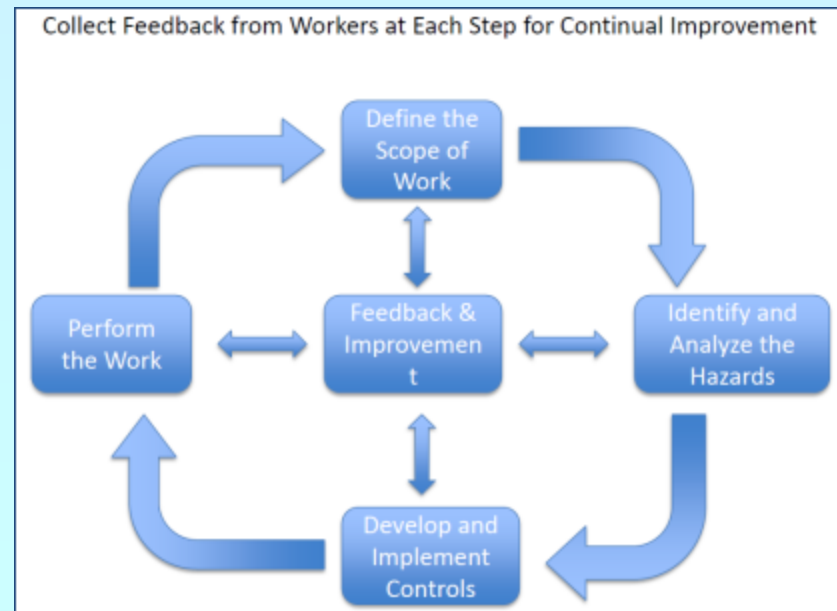


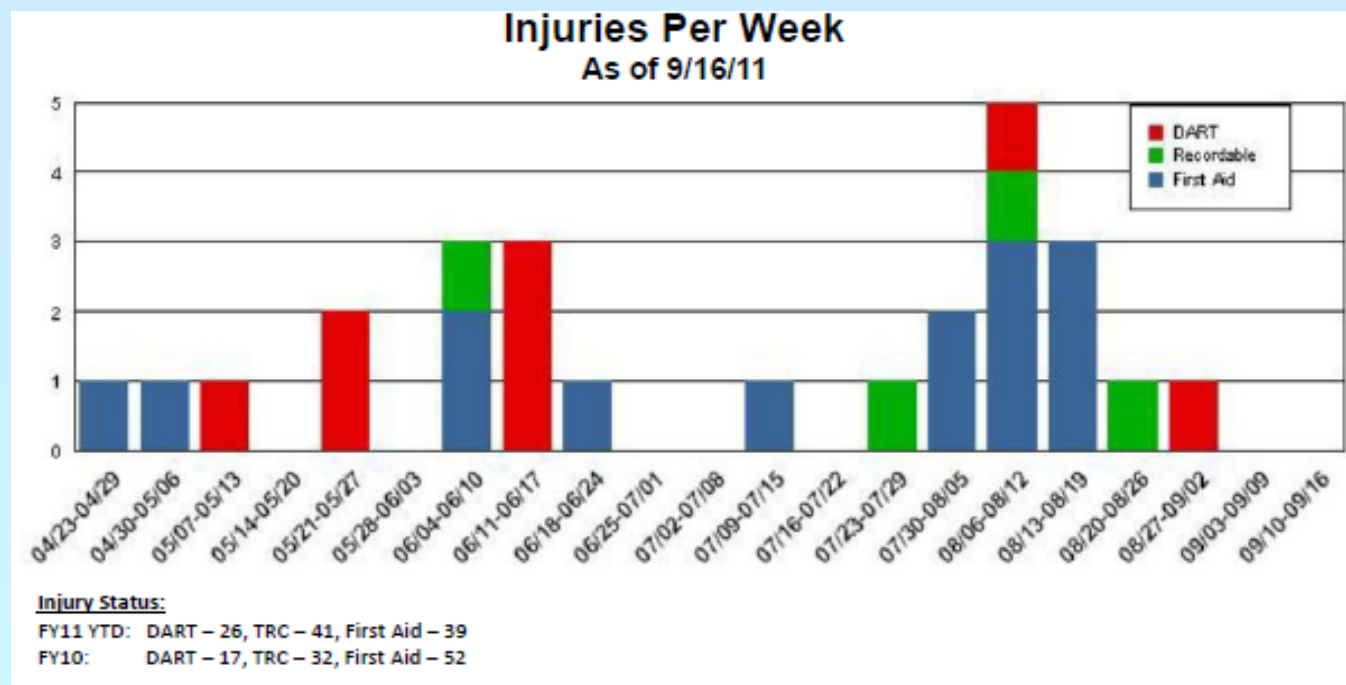
- Electronics test/assembly room-to-parking lot door (does not open/close/lock properly - needs to be replaced)
- Temperature in utility hall (where new air compressor is installed) is exceedingly high (transformer cases as high as 135 F)

Work Planning

For the most effective work planning, supervisors should use the following “hierarchy of controls” in order of priority:

- Substitution
- Engineering
- Administrative
- PPE





Recent Injuries: Subcontractor pinched a finger between machinery and material. Taken to hospital, non reportable

Incidents:

Transmission oil spill 1 gallon unknown source - under investigation
 Compressor line failure oil spill 100-180 gallons - under investigation
 Hydraulic oil spill during hammer test - 1 cup cleaned and disposed
 Lumber fall roof to ground NSLS II - no injuries
 New air compressor fell off fork lift. Total loss
 Refrigerator dropped 2 steps F&O - no injuries, minor damage

Where To Find PHENIX Engineering Info

Summer ends and Fall begins tomorrow morning at 5:04 AM



Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm